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B. Noel Kivlin
Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398

EXAMINER

MANOSKEY, JOSEPH D

| ART UNIT | PAPER NUMBER |
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2113

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,818

Applicant(s)

WILLIAMS ET AL.

Examiner

Joseph D. Manoskey

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,12-16,28 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,12-16 and 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

PD

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 12-16, 28, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Meir et al., U.S. Patent 5,652,893, hereinafter referred to as "Ben-Meir" in view of Edmonds et al., U.S. Patent 6,412,079 hereinafter referred to as "Edmonds".

3. Referring to claim 10, Ben-Meir discloses the use of a first and second power supply that are connected to backplane. Ben-Meir also teaches the lines being redundant (See Fig. 1, Col. 2, lines 1-8, and Col. 3, lines 15-38). This is interpreted as a first redundant source of power adapted to provide power to a first split path, and a second redundant source of power adapted to provide power to a second split path, wherein the first and second split paths are adapted to transmit signals.

Ben-Meir does not teach a first portion and a second portion of a message, wherein the first and second split paths are adapted to convey signal corresponding to a first portion and a second portion of a message, respectively in parallel from a source

to a destination, however Ben-Meir does teach redundant transmission and reception lines (See Col. 2, lines 2-4). Edmonds teaches a dual backplanes that can perform the same task in an active/active manner, this would include the same message being transmitted on both backplanes, thus a first portion would be on a first split path and a second portion would be on a second split path (See Fig. 3 and Col. 6, lines 17-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the two parallel backplanes of Edmonds with the redundant power supplies of Ben-Meir. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because the both Edmonds and Ben-Meir show a desire to use redundancy in order to be as close to a hundred percent availability as possible (See Edmonds, Col. 6, lines 17-22 and Ben-Meir, Col. 1, lines 60-62).

4. Referring to claims 12 and 13, Ben-Meir and Edmonds teach all the limitations (See rejection of claim 10) including the use of redundant power supplies and redundant lines, this is interpreted as a first redundant source of power comprises a first and second power supply adapted to provide a first and second portion of power to the first split path and a second redundant source of power comprises a third and fourth power supply adapted to provide a third and a fourth portion of power to the second split path (See Ben-Meir, Fig. 1, Col. 2, lines 1-8, and Col. 3, lines 15-38).

5. Referring to claim 14, Ben-Meir and Edmonds disclose all the limitations (See rejection of claim 10) including the use of an environment monitor, this interpreted as an

environmental system monitoring demon adapted to detect malfunctions in the first, second, third and fourth power supplies (See Ben-Meir, Fig. 1 and Col. 3, lines 21-28).

6. Referring to claim 15 and 16, Ben-Meir and Edmonds teach all the limitations (See rejection of claim 14) including power management determining power allocation and dealing with power failures (See Ben-Meir, Col. 4, lines 39-43) and Ben-Meir teaches the use of redundant lines and having a third and fourth power supply (See Ben-Meir, Fig. 1 and Col. 2, lines 1-8). This is interpreted as the ESMD being adapted to instruct the system control unit to transmit messages along the second split path if the first split path becomes substantially unable to transmit messages because the first and second power supplies become substantially unable to provide power to the first split path and adapted to instruct the system control unit to transmit messages along the first split path if the second split path becomes substantially unable to transmit messages because the third and fourth power supplies become substantially unable to provide power to the second split path.

7. Referring to claim 28, Ben-Meir discloses the use of a first and second power supply that are connected to backplane. Ben-Meir also teaches the lines being redundant (See Fig. 1, Col. 2, lines 1-8, and Col. 3, lines 15-38). This is interpreted as a method providing a first redundant source of power to a first split path, and providing a second redundant source of power to a second split path, wherein the first and the second split paths are adapted to transmit signals. Ben-Meir also teaches managing

the power system with a power management system, this interpreted as managing the first and second redundant sources of power (See Col. 3, lines 29-38).

Ben-Meir does not teach a first portion and a second portion of a message, wherein the first and second split paths are adapted to convey signal corresponding to a first portion and a second portion of a message, respectively in parallel from a source to a destination, however Ben-Meir does teach redundant transmission and reception lines (See Col. 2, lines 2-4). Edmonds teaches a dual backplanes that can perform the same task in an active/active manner, this would include the same message being transmitted on both backplanes, thus a first portion would be on a first split path and a second portion would be on a second split path (See Fig. 3 and Col. 6, lines 17-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the two parallel backplanes of Edmonds with the redundant power supplies of Ben-Meir. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because the both Edmonds and Ben-Meir show a desire to use redundancy in order to be as close to a hundred percent availability as possible (See Edmonds, Col. 6, lines 17-22 and Ben-Meir, Col. 1, lines 60-62).

8. Referring to claims 30 and 31, Ben-Meir and Edmonds teach all the limitations (See rejection of claim 28) including the use of redundant power supplies and redundant lines, this is interpreted as a first redundant source of power comprises a first and second power supply adapted to provide a first and second portion of power to the first split path and a second redundant source of power comprises a third and fourth power

supply adapted to provide a third and a fourth portion of power to the second split path (See Ben-Meir, Fig. 1, Col. 2, lines 1-8, and Col. 3, lines 15-38).

9. Referring to claim 32, Ben-Meir and Edmonds disclose all the limitations (See rejection of claim 28) including the use of an environment monitor, this interpreted as managing the first and second redundant power supplies comprises determining if the first, second, third, and fourth power supplies are malfunctioning (See Ben-Meir, Fig. 1 and Col. 3, lines 21-28).

10. Referring to claim 33 and 34, Ben-Meir and Edmonds teach all the limitations (See rejection of claim 28) including power management determining power allocation and dealing with power failures (See Ben-Meir, Col. 4, lines 39-43) and Ben-Meir teaches the use of redundant lines and having a third and fourth power supply (See Ben-Meir, Fig. 1 and Col. 2, lines 1-8). This is interpreted as instructing the system to transmit messages along the second split path if the first split path becomes substantially unable to transmit messages because the first and second power supplies become substantially unable to provide power to the first split path and adapted to instruct the system control unit to transmit messages along the first split path if the second split path becomes substantially unable to transmit messages because the third and fourth power supplies become substantially unable to provide power to the second split path.

11. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Meir and Edmonds in view of Weinstein, U.S. Patent 5,939,799, hereinafter referred as "Weinstein".

12. Referring to claims 35 and 36, Ben-Meir and Edmonds discloses all the limitations (See rejection of claim 10) except for the power distribution network comprising a first and second capacitor network comprising at least one capacitor coupled to the first split path and adapted to store the portion of power provided by the first or second power supply for a selected duration, however Ben-Meir does teach having redundant power sources and a desire to prevent any amount of downtime from the failure of a power supply (See Col. 3, lines 15-28). Weinstein teaches the use of capacitors and a switch connected to the power supplies that supply power to a load during a switch from a first to a second power supply (See Col. 1, lines 60-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the switch and capacitors of Weinstein with the redundant power supplies of Ben-Meir and Edmonds. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because it prevents any interruption or downtime of the power during switching (See Weinstein, Col. 1, lines 60-64).

13. Referring to claim 37, Ben-Meir, Edmonds, and Weinstein teach all the limitations (See rejection of claim 36) including the system having a power management system, this interpreted as the first and second capacitor networks coupled in a current sharing

design to substantially provide redundant power to the first split path reducing the chance that a malfunction in one power supply will introduce errors into signals transmitted along the first split path and compromise the function of the system (See Ben-Meir, Col. 3, lines 29-38).

14. Referring to claim 38, Ben-Meir, Edmonds, and Weinstein disclose all the limitations (See rejection of claim 36) including the system having a switch to switch between the first and second power supplies, this is interpreted as a the first and second capacitor networks coupled at a switch that substantially provides redundant power to the first split path, reducing the chance that a malfunction in one power supply will introduce errors into signals transmitted along the first split path and compromise the function of the system (See Weinstein, Col. 1, lines 60-64).

Response to Arguments

15. Applicant's arguments, see pages 2-6 of amendment, filed 4 August 2005, with respect to the rejection(s) of claim(s) 10, 12-16, 28, and 30-38 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new found prior art, see above rejections.

Conclusion


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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Manoskey whose telephone number is (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDM
October 14, 2005


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100